

WHAT IS CLAIMED IS

1. An image processing apparatus for generating data to be used for image processing, the image processing apparatus comprising:
 - a dividing unit to divide code data of a compressed image into a plurality of segments;
 - a code size computing unit to compute a code size corresponding to each of the plurality of segments; and
 - a memory unit to store the corresponding relation between the code size and each of the plurality of segments.
2. The image processing apparatus as claimed in claim 1, wherein the plurality of segments is a plurality of image quality levels.
3. The image processing apparatus as claimed in claim 2, wherein the image quality level is a layer.
4. The image processing apparatus as claimed in claim 1, wherein the plurality of segments is a plurality of rectangular domains.
5. The image processing apparatus as claimed in claim 4, wherein the dividing unit includes a unit to divide the code data into the plurality of rectangular domains based on a tile, a precinct, or a code block.
6. The image processing apparatus as claimed in claim 1, wherein the plurality of segments is a plurality of color components.
7. The image processing apparatus as claimed in claim 1, wherein the plurality of

segments is a plurality of resolution levels.

8. The image processing apparatus as claimed in claim 1, wherein the plurality of segments is a plurality of packets.

9. An image processing apparatus for generating data to be used for image processing, the image processing apparatus comprising:

a code size setting unit to set one or more code sizes;

an image quality level computing unit to compute an image quality level matching with the set one or more code sizes;

a dividing unit to divide code data of a compressed image into a plurality of image quality levels;

a code size computing unit to compute a code size corresponding to each of the plurality of image quality levels; and

a memory unit to store the corresponding relation between the code size and each of the plurality of image quality levels.

10. The image processing apparatus as claimed in claim 9, wherein the code size setting unit sets one or more code sizes based on the type of transmission line, the capacity of a transmission line, the type of an image display apparatus, the display resolution of an image display apparatus, or the process speed of an image display apparatus.

11. An image compression apparatus for generating compressed code data of an image, the image compression apparatus comprising:

a dividing unit to divide code data of a compressed image into a plurality of segments;

a code size computing unit to compute a code size corresponding to each of the plurality of segments; and

an embedding unit to embed the corresponding relation between the code size and each of the plurality of segments into the code data.

12. The image compression apparatus as claimed in claim 11, wherein the plurality of segments is a plurality of image quality levels.

13. The image compression apparatus as claimed in claim 12, wherein the image quality level is a layer.

14. The image compression apparatus as claimed in claim 11, wherein the plurality of segments is a plurality of rectangular domains.

15. The image compression apparatus as claimed in claim 14, wherein the dividing unit includes a unit to divide the code data into the plurality of rectangular domains based on a tile, a precinct, or a code block.

16. The image compression apparatus as claimed in claim 11, wherein the plurality of segments is a plurality of color components.

17. The image compression apparatus as claimed in claim 11, wherein the plurality of segments is a plurality of resolution levels.

18. The image compression apparatus as claimed in claim 11, wherein the plurality of segments is a plurality of packets.

19. An image compression apparatus for generating compressed code data of an image, the image compression apparatus comprising:

a code size setting unit to set one or more code sizes;
an image quality level computing unit to compute an image quality level matching with the set one or more code sizes;
a dividing unit to divide code data of a compressed image into a plurality of image quality levels;
a code size computing unit to compute a code size corresponding to each of the plurality of image quality levels; and
an embedding unit to embed the corresponding relation between the code size and each of the plurality of image quality levels into the code data.

20. The image compression apparatus as claimed in claim 19, wherein the code size setting unit sets one or more code sizes based on the type of transmission line, the capacity of a transmission line, the type of an image display apparatus, the display resolution of an image display apparatus, or the process speed of an image display apparatus.

21. The image compression apparatus as claimed in claim 19, wherein the image quality level is a layer.

22. The image processing apparatus as claimed in claim 1, further comprising:
a desired code size setting unit to set a desired code size; and
a modifying unit to modify the code data to the desired code size based on the corresponding relation stored in the memory unit.

23. The image processing apparatus as claimed in claim 22, further comprising:
a location computing unit to compute a truncation location matching with the set desired code size based on the corresponding relation stored in the memory unit; and
a location information unit to store information of the computed truncation location.

24. The image processing apparatus as claimed in claim 9, further comprising:
a desired code size setting unit to set a desired code size; and
a modifying unit to modify the code data to the desired code size based on the
corresponding relation stored in the memory unit.

25. The image processing apparatus as claimed in claim 24, further comprising:
a location computing unit to compute a truncation location matching with the set
desired code size based on the corresponding relation stored in the memory unit; and
a location information memory unit to store information of the computed truncation
location.

26. An image processing apparatus for processing the code data of the image
compression apparatus in claim 11, the image processing apparatus comprising:
a desired code size setting unit to set a desired code size; and
a modifying unit to modify the code data to the desired code size based on the
corresponding relation embedded into the code data.

27. The image processing apparatus, as claimed in claim 26, further comprising:
a location computing unit to compute a truncation location matching with the set
desired code size based on the corresponding relation embedded into the code data; and
a location information memory unit to store information of the computed truncation
location.

28. An image processing apparatus for processing the code data of the image
compression apparatus in claim 19, the image processing apparatus comprising:
a desired code size setting unit to set a desired code size; and

a modifying unit to modify the code data to the desired code size based on the corresponding relation embedded into the code data.

29. The image processing apparatus as claimed in claim 28, further comprising:
a location computing unit to compute a truncation location matching with the set desired code size based on the corresponding relation embedded into the code data; and
a location information memory unit to store information of the computed truncation location.

30. An image processing method for generating data to be used for image processing, the image processing method comprising:
a) dividing code data of a compressed image into a plurality of segments;
b) computing a code size corresponding to each of the plurality of segments; and
c) storing the corresponding relation between the code size and each of the plurality of segments.

31. The image processing method as claimed in claim 30, wherein the plurality of segments is a plurality of image quality levels.

32. The image processing method as claimed in claim 31, wherein the image quality level is a layer.

33. The image processing method as claimed in claim 30, wherein the plurality of segments is a plurality of rectangular domains.

34. The image processing method as claimed in claim 33, wherein the dividing unit includes a unit to divide the code data into the plurality of rectangular domains based on

a tile, a precinct, or a code block.

35. The image processing method as claimed in claim 30, wherein the plurality of segments is a plurality of color components.

36. The image processing method as claimed in claim 30, wherein the plurality of segments is a plurality of resolution levels.

37. The image processing method as claimed in claim 30, wherein the plurality of segments is a plurality of packets.

38. An image processing method for generating data to be used for image processing, the image processing method comprising:

- a) setting one or more code sizes;
- b) computing an image quality level matching with the set one or more code sizes;
- c) dividing code data of a compressed image into a plurality of image quality levels;
- d) computing a code size corresponding to each of the plurality of image quality levels; and
- e) storing the corresponding relation between the code size and each of the plurality of image quality levels.

39. The image processing method as claimed in claim 38, wherein setting one or more code sizes comprises setting one or more code sizes based on the type of transmission line, the capacity of a transmission line, the type of an image display apparatus, the display resolution of an image display apparatus, or the process speed of an image display apparatus.

40. An image compression method for generating compressed code data of an

image, the image compression method comprising:

- a) dividing code data of a compressed image into a plurality of segments;
- b) computing a code size corresponding to each of the plurality of segments; and
- c) embedding the corresponding relation between the code size and each of the plurality of segments into the code data.

41. The image compression method as claimed in claim 40, wherein the plurality of segments is a plurality of image quality levels.

42. The image compression method as claimed in claim 41, wherein the image quality level is a layer.

43. The image compression method as claimed in claim 40, wherein the plurality of segments is a plurality of rectangular domains.

44. The image compression method as claimed in claim 43, wherein dividing code data comprises dividing the code data into the plurality of rectangular domains based on a tile, a precinct, or a code block.

45. The image compression method as claimed in claim 40, wherein the plurality of segments is a plurality of color components.

46. The image compression method as claimed in claim 40, wherein the plurality of segments is a plurality of resolution levels.

47. The image compression method as claimed in claim 40, wherein the plurality of segments is a plurality of packets.

48. An image compression method for generating compressed code data of an image, the image compression method comprising:

- a) setting one or more code sizes;
- b) computing an image quality level matching with the set one or more code sizes;
- c) dividing code data of a compressed image into a plurality of image quality levels;
- d) computing a code size corresponding to each of the plurality of image quality levels; and
- e) embedding the corresponding relation between the code size and each of the plurality of image quality levels into the code data.

49. The image compression method as claimed in claim 48, wherein setting one or more code sizes comprises setting one or more code sizes based on the type of transmission line, the capacity of a transmission line, the type of an image display apparatus, the display resolution of an image display apparatus, or the process speed of an image display apparatus.

50. The image compression method as claimed in claim 48, wherein the image quality level is a layer.

51. The image processing method as claimed in claim 48, further comprising:

- d) setting a desired code size; and
- e) modifying the code data to the desired code size based on the corresponding relation stored in a memory unit.

52. The image processing method as claimed in claim 51, further comprising:

- f) computing a truncation location matching with the set desired code size based on the corresponding relation stored in step c); and

g) storing information of the computed truncation location.

53. The image processing method as claimed in claim 38, further comprising the steps of:

f) setting a desired code size; and

g) modifying the code data to the desired code size based on the corresponding relation stored in the memory unit.

54. The image processing method as claimed in claim 53, further comprising:

h) computing a truncation location matching with the set desired code size based on the corresponding relation stored in the memory unit; and

i) storing information of the computed truncation location.

55. An image processing method for processing the code data of the image compression method in claim 40, the image processing method comprising:

a) setting a desired code size; and

b) modifying the code data to the desired code size based on the corresponding relation embedded into the code data.

56. The image processing method as claimed in claim 55, further comprising:

c) computing a truncation location matching with the set desired code size based on the corresponding relation embedded into the code data; and

d) storing information of the computed truncation location.

57. An image processing method for processing the code data of the image compression method in claim 48, the image processing method comprising:

a) setting a desired code size; and

b) modifying the code data to the desired code size based on the corresponding relation embedded into the code data.

58. The image processing method as claimed in claim 57, further comprising:

c) computing a truncation location matching with the set desired code size based on the corresponding relation embedded into the code data; and

d) storing information of the computed truncation location.

59. An article of manufacture having one or more recordable media storing instructions thereon which, when executed by a system, cause the system to:

divide code data of a compressed image into a plurality of segments;

compute a code size corresponding to each of the plurality of segments; and

store the corresponding relation between the code size and each of the plurality of segments.

60. An article of manufacture having one or more recordable media storing instructions thereon which, when executed by a system, cause the system to:

set one or more code sizes;

compute an image quality level matching with the set one or more code sizes;

divide code data of a compressed image into a plurality of image quality levels;

compute a code size corresponding to each of the plurality of image quality levels;

and

store the corresponding relation between the code size and each of the plurality of image quality levels.

61. An article of manufacture having one or more recordable media storing instructions thereon which, when executed by a system, cause the system to:

divide code data of a compressed image into a plurality of segments;
compute a code size corresponding to each of the plurality of segments; and
embed the corresponding relation between the code size and each of the plurality of segments into the code data.

62. An article of manufacture having one or more recordable media storing instructions thereon which, when executed by a system, cause the system to:

set one or more code sizes;
compute an image quality level matching with the set one or more code sizes;
divide code data of a compressed image into a plurality of image quality levels;
compute a code size corresponding to each of the plurality of image quality levels;
and

embed the corresponding relation between the code size and each of the plurality of image quality levels into the code data.

63. The article of manufacture defined in claim 59 wherein the instructions further cause the system to:

set a desired code size; and
modify the code data to the desired code size based on the corresponding relation stored in the memory unit.

64. The article of manufacture defined in claim 63 wherein the instructions further cause the system to:

compute a truncation location matching with the set desired code size based on the corresponding relation stored in the memory unit; and
- store information of the computed truncation location.

65. The article of manufacture defined in claim 60 wherein the instructions further cause the system to:

set a desired code size; and

modify the code data to the desired code size based on the corresponding relation stored in the memory unit.

66. The article of manufacture defined in claim 65 wherein the instructions further cause the system to:

compute a truncation location matching with the set desired code size based on the corresponding relation stored in the memory unit; and

store information of the computed truncation location.

67. The article of manufacture defined in claim 61 wherein the instructions further cause the system to:

set a desired code size; and

modify the code data to the desired code size based on the corresponding relation embedded into the code data.

68. The article of manufacture defined in claim 67 wherein the instructions further cause the system to:

compute a truncation location matching with the set desired code size based on the corresponding relation embedded into the code data; and

store information of the computed truncation location.

69. The article of manufacture defined in claim 62 wherein the instructions further cause the system to:

set a desired code size; and

modify the code data to the desired code size based on the corresponding relation embedded into the code data.

70. The article of manufacture defined in claim 69 wherein the instructions further cause the system to:

compute a truncation location matching with the set desired code size based on the corresponding relation embedded into the code data; and
store information of the computed truncation location.